OPTIMIST

EDMONTON
Q2 2017

The Currency Question

The benefits and drawbacks of currency hedging seem to be in perpetual debate. It is inevitable that Canadians who see the benefit of globally diversified portfolios will find their portfolio returns affected by currency movements. The question is: to what degree and in which direction?

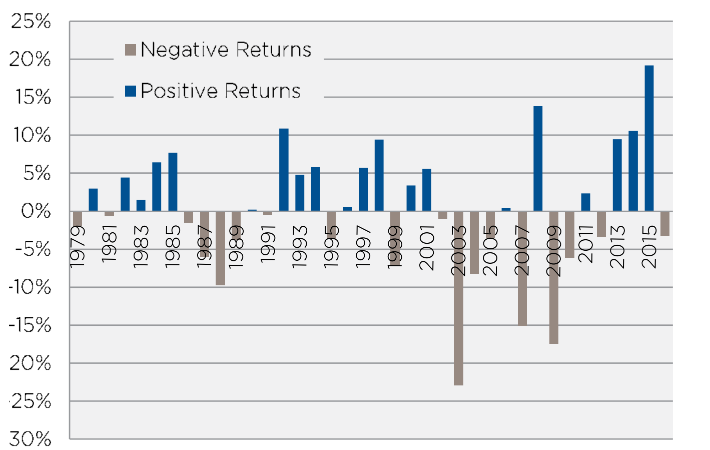
In this quarter's newsletter, we look at the impacts of currency on both U.S. and International equities in an attempt to provide definitive guidance for Canadian investors.

Short-term pain

Given that foreign currencies can depreciate and, as a result, reduce investment returns measured in Canadian dollars, this depreciation should be considered as a potential risk factor. Should investors with globally diversified portfolios always hedge the currency exposure back to Canadian dollars? With an implied message that hedging makes investment funds safer, many fund management companies in Canada market their funds to investors with the promise of hedging the currency exposure.[1] It is possible to measure whether hedging reduces risk and it appears, from time to time, that unhedged investors have experienced negative, short-term returns due to currency.

Reviewing the year-over-year effect of currency changes on U.S. assets (Chart 1), it is easy to understand how disappointed Canadian investors felt with their U.S. investments in 2003, 2007 and 2009. The strengthening Canadian dollar caused unhedged U.S. dollar investments to be worth at least 15% less in each of these years.

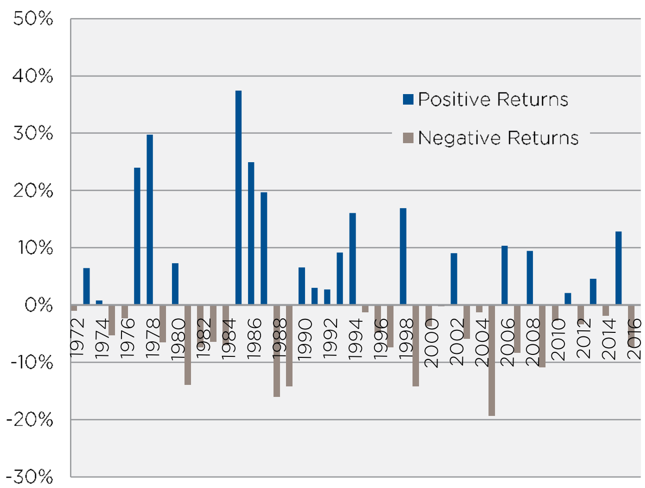
CHART 1: Effect of currency on U.S. market returns by year[3]



Even within diversified, non-U.S. international equity holdings where one might expect multiple currencies to reduce fluctuations of Canadian-dollar returns, currency can still

have a significant impact. As Chart 2 shows, over the past few decades, international equities have also had multiple years with double-digit losses due to the Canadian dollar strengthening against this basket of foreign currencies.

CHART 2: Effect of currency on international developed market returns by year[4]



Long-term gain

While short-term swings due to currency can be large and sometimes negative, these swings do not align with the investment horizon of serious, long-term investors. To understand the impact of currency on patient investors, we have analyzed the effect on returns of hedging currency across multiple timeframes (Tables 1 and 2).

Based on this analysis, it is clear that over longer time periods the impact of currency is muted. This is particularly important for Canadian investors to remember, as in 2016 they experienced negative effects from currency (Tables 1 and 2). Yet in the 5-year, 10-year, and since inception time periods shown, the impact of U.S. and foreign currency exposure actually has been slightly positive.

TABLE 1: Effect of currency on return in U.S. markets (Russell 3000)[3]

Timeframe	Annualized Return-Unhedged	Annualized Return-Hedged	Impact of Foreign Currency
1-Year (2016)	9.5%	12.7%	-3.2%
Previous 5 years (2012 – 2016)	21.1%	14.7%	6.4%
Previous 10 years (2007-2016)	8.6%	7.1%	1.5%
Since inception (1978 – 2016)	12.1%	11.7%	0.4%

TABLE 2: Effect of currency on return in international developed markets (MSCI EAFE)[4]

Timeframe	Annualized Return-Unhedged	Annualized Return-Hedged	Impact of Foreign Currency
1-Year (2016)	-1.4%	5.9%	-7.3%
Previous 5 years (2012 – 2016)	13.1%	12.4%	0.7%
Previous 10 years (2007-2016)	2.7%	2.7%	0.0%
Since inception (1971 – 2016)	10.3%	8.5%	1.8%

In the period reviewed, there was a benefit achieved from remaining exposed to both U.S. and International currencies (Charts 3 and 4). But unless there is some permanent event that impacts the value of the Canadian dollar in terms of other foreign currencies, we would expect minimal long-term impact on returns (positive or negative) from currency exposure.

CHART 3: U.S. equity growth – unhedged vs hedged[3]

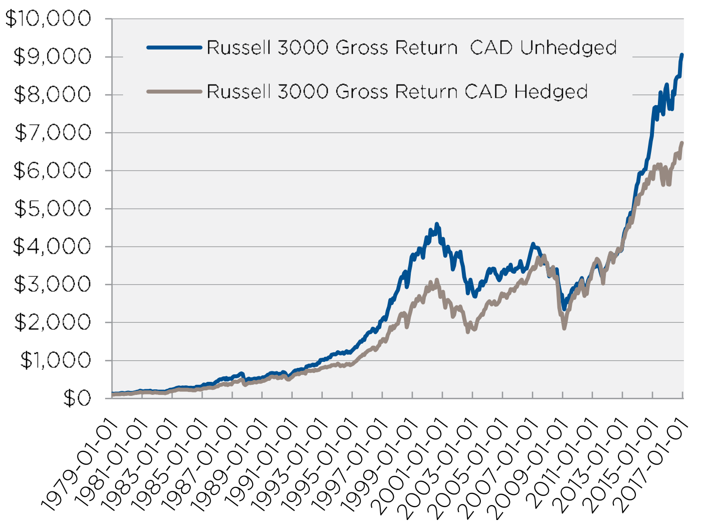
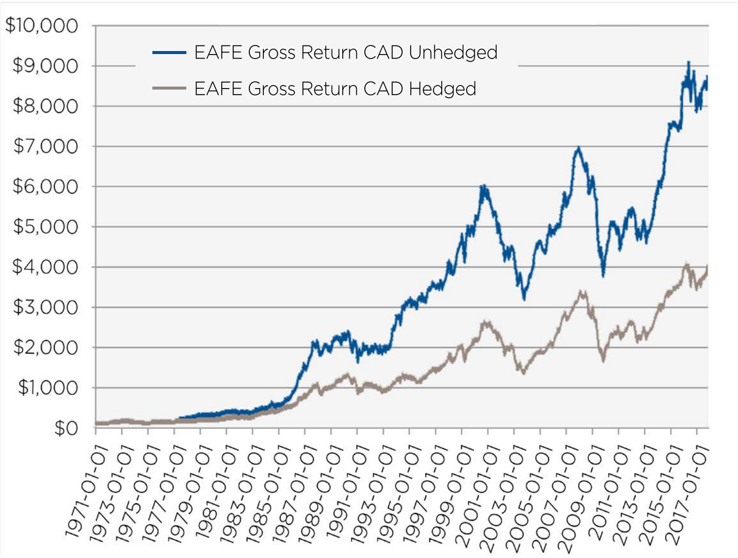


CHART 4: International equity growth – unhedged vs hedged[4]



What about risk?

Perhaps the most interesting aspect of the hedged versus unhedged data is how currency has affected the volatility of portfolio returns. For U.S. assets, the reduction in volatility provided by currency is pronounced. While 2016 experienced both a reduction in return and a slight increase in volatility, over longer time periods, U.S. dollar denominated assets have experienced reduced volatility (Table 3). This has meant a smoother ride for Canadians who did not hedge U.S. equities during significant market downturns such as 1999 and 2008.

While this is by no means a guarantee of benefits in future downturns, there does appear to be evidence that the 'flight to quality' that occurs during stock market stress pushes up the U.S. dollar and reduces the scale of negative returns for Canadians.

This is logical as Canada is dominated by commodity companies that sell products to global markets priced in U.S. dollars. As the U.S. dollar rises, the price of these commodities falls. By hedging U.S. investment assets, Canadians take on more risk if commodity prices fall in value. This is a particularly important realization for Albertans, whose livelihoods are often driven by the commodity cycle.

TABLE 3: Impact of currency on risk* (Russell 3000)[3]

Timeframe	Unhedged	Hedged	Impact of Foreign Currency
1-Year (2016)	10.9%	10.7%	0.2%
Previous 5 years (2012 – 2016)	9.8%	10.5%	-0.7%
Previous 10 years (2007-2016)	11.9%	15.7%	-3.8%
Since inception (1979 – 2016)	13.8%	15.3%	-1.5%

*Calculated as standard deviation of monthly returns, annualized. Negative implies reduced risk.

From an international perspective, volatility is quite different compared to the U.S. dollar experience. Although international assets have had increased returns due to currency, with respect to volatility, results are mixed between modest increases or decreases depending on the timeframe under review (Table 4). As there does not appear to be any appreciable benefit to hedging away the foreign currency exposure over the long term, taking on the additional costs that are involved in all hedging strategies does not seem prudent.

PAVILION INVESTMENT HOUSE

TABLE 4: Impact of currency on risk* (MSCI EAFE)[4]

Timeframe	Unhedged	Hedged	Impact of Foreign Currency
1-Year (2016)	14.1%	15.3%	-1.2%
Previous 5 years (2012 – 2016)	11.7%	11.3%	0.4%
Previous 10 years (2007-2016)	13.7%	14.9%	-1.2%
Since inception (1971 – 2016)	15.6%	14.4%	1.2%

*Calculated as standard deviation of monthly returns, annualized. Negative implies reduced risk.

The Pavilion approach to hedging

At Pavilion Investment House, we are very interested in holding assets that have a rational purpose for either increasing return or reducing risk within each portfolio as a whole. Within this holistic context, we see currency diversification primarily as a risk reduction tool for equities. As a result, while every client's situation is different, we generally recommend that equity market investments outside of Canada be held in foreign currency rather than being hedged.

We do make an exception to this hedging principle when investing in global fixed income markets. A bond is purchased with an expectation of yield and maturity and, as has been shown, currencies can fluctuate by much more than the yield on investment grade bonds in the current low interest rate environment.

As a result, with the short time horizon of our bond holdings, we typically will recommend hedging out the foreign currency exposure.

Interestingly, this approach can ring true for both private investors and institutions. Our colleague Yusuke Khan, Senior Consultant at Pavilion Advisory Group Ltd., recently expressed a similar position in his whitepaper for pension funds and other institutions. "A straightforward argument in favour of hedging currency exposures can be made with regard to strategies...where the volatility of the currency movements might be greater than that of the underlying strategy."[2] He also recommends a holistic approach that formalizes currency strategy, as we have done above.

Outside of Pavilion

A similar approach to hedging has been recognized by some of Canada's largest pension funds. In the 2013 CPP annual report, the Canada Pension Plan Investment Board saw 'no compelling reason' to hedge away exposure to foreign currencies resulting from equity investments.[1]

Conclusion

As stock prices go up or down, having a consistent currency strategy for international investments is vital. When looking at equities specifically, it is important to keep in mind:

- Recent events can weigh more heavily on our decision-making process. It is important to keep this recency bias in mind as we review 2016 returns that are different from historical norms.
- From a long-term perspective, holding investments denominated in foreign currencies has appeared to reduce risk historically.
- In particular, while the U.S. dollar remains a global reserve currency, an unhedged portfolio likely will provide a diversification benefit for Canadians. Significant losses during large downturns such as the 2008 financial crisis may be lessened by holding unhedged U.S. assets.
- Given there appears to be no meaningful benefit for Canadian investors to hedging the foreign equity portion of a portfolio, we can then avoid all costs associated with hedging.

References:

1. "Why Currency Hedging Doesn't Work in Canada". Dan Bortolotti. MoneySense March 2014. http://www.moneysense.ca/columns/why-currency-hedging-doesnt-work-in-canada/
2. "Currency Exposure: Diversifier or Unrewarded Risk?". Yusuke Khan, Senior Consultant, Pavilion Advisory Group Ltd. 2016. https://www.pavilioncorp.com/wp-content/uploads/2016/07/Article-Currency.pdf
3. CHART 1, 3 & TABLE 1, 3:
   - Russell 3000 Total Return USD Index provided by Bloomberg (BBG Ticker RU30INTR Index USD). Russell 3000 Gross Monthly Return CAD Unhedged calculated by the Russell 3000 Total Return USD Index multiplied by the monthly spot rate.
4. CHART 2, 4 & TABLE 2, 4:
   - MSCI Daily Total Return Gross EAFE USD Index provided by Bloomberg (BBG Ticker GDDUEAFE Index USD). MSCI EAFE Unhedged calculated by the MSCI Daily Total Return Gross EAFE USD Index multiplied by the monthly spot rate.
   - MSCI Daily Total Return Gross EAFE Local Index provided by Bloomberg (BBG Ticker GDDLEAFE Index CAD). MSCI EAFE Hedged is the MSCI Daily Total Return Gross EAFE Local Index.

Marshall McAlister, CFA
Private Wealth Counsellor, Principal

mmcalister@pavilioncorp.com

T 780 638 2491

Cary Williams, CFP
Associate Private Wealth Counsellor

cwilliams@pavilioncorp.com

T 780 638 2493

Joshua Morraz
Private Wealth Analyst

jmorraz@pavilioncorp.com

T 780 638 2494